I claim:

1. In a process for the preparation of TS-1 catalyst particles suitable for the production of oxirane compounds, the improvement of reducing the average diameter of the TS-1 particles weighted by volume, to below 10 microns and spray drying an aqueous suspension of the size reduced TS-1 particles.

2. The process for producing an oxirane compound which comprises epoxidizing an olefin by catalytic reaction with hydrogen peroxide wherein the catalyst is produced by the process of claim 1.

3. The process for producing an oxirane compound which comprises reacting an olefin, hydrogen and oxygen at epoxidizing conditions in the presence of a catalyst comprised of a noble metal supported on TS-1 produced by the process of claim 1.

4. The process of claim 1 wherein the catalyst particles are also comprised of binder.

5. The process of claim 2 wherein the olefin is propylene.

6. The process of claim 3 wherein the olefin is propylene.

7. The process of claim 3 wherein the noble metal is palladium.